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Posing or Candid? The effect of narcissism on consumers' responses towards endorsers' modeling styles in advertisements

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Abstract: In the real world, many advertisements feature a posing endorser, while on the contrary others feature an endorser with a more candid style. This research investigates the effect of the endorser's modeling style on consumers' responses. Specifically, whether millennials consumer's level of narcissism has an effect on their brand perception, advertisement perception and on whether the product advertised stands a better chance at selling, depending on the modeling style (candid versus posing). Findings show that individuals with higher levels of narcissism have a lower purchase likelihood when presented with an advertisement portraying a model in a candid (versus posing) stance, whereas this difference was not observed for those with low level of narcissism. Authenticity goal and impression management goal cannot explain this effect. Moreover, there was no effect for advertisement evaluation and brand evaluation. Possible explanations for this will be discussed, as well as managerial implications, based on this study's findings.

Keywords: Narcissism; Advertisement endorser's modeling style; Brand evaluation; Advertisement evaluation; Purchase likelihood

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1. Introduction

Currently, companies are facing several issues on how to capture the attention of the Millennial Generation (Moreno, Lafuente, Avila & Moreno, 2017). These companies' old strategies hold no real value for the new generation of consumers. Consequently, new measures have to be adopted by companies, who are facing the risk of being left behind, for their lack of evolution. Strong online presence, sustainability awareness, offbeat humor, artistic ads with high visual impact and reviews schemes, are some examples of effective strategies that companies are carrying out more and more nowadays (Taylor, 2018).

Millennials - born from 1980 until 2000 (Moreno, Lafuente, Avila & Moreno, 2017) - gather a set of common characteristics that define them. They represent a very large group of consumers, and it is, therefore, important to understand their needs. First of all, it's a generation that uses technology in their daily routine, which makes them easy to find if we're looking for them: they are 'online', that's their arena (Schmidt, 2017). Characterized by extravagant, egocentric personalities with high levels of narcissism (Metz, 2000), their shopping process is a time of enjoyment, where loyalty to brands is relative. Also, millennials tend to spend their income faster, due to the use of social networks and easier access to information online (Moreno, Lafuente, Avila & Moreno, 2017). In regards to luxury brands, this segment tends to consume goods not because they relate with the brands particularly, but to acquire status and the sense of a bigger personality (Moreno, Lafuente, Avila & Moreno, 2017).

As mentioned above, narcissism is a big trait amongst millennials. Being narcissistic can be defined as living in a "state of being the center of a loving world in which a person could act

spontaneously our of desire", where its main feature, is an enormous sense of self-importance attached to fragile and low self-esteem (Caramia, 2015). It can also be described as a "human trait that is commonly associated with arrogance and the need for others' attention" (Awad and Yuon, 2018). Considered to be a group that is "most swayed by self-image motives" which leads to their purchasing behavior to be characterized by the same motives (Gregg, Ciesek & Hart, 2007). Such consumers are often described as materialistic and are more prone to incur in compulsive buying (Rose, 2007). They are obsessed with "unlimited success, power, requiring excessive admiration" (Caramia, 2015). Therefore, luxury and very fashionable brands are a narcissist's "go to" in their pursuit of elevation, self-love, power and status. The purchase of "high prestigious products" give them a sense of rebellion and distinction, resulting in a preference to buy products that look better rather than products that perform better (Cisek et al., 2014). This type of consumer is likely to "join exclusive clubs, purchase expensive cars, rare art pieces, wear designer clothes (…)" (Caramia, 2015) in order to get other's attention and to increase their own sense of self-worth.

The narcissistic consumer gathers a set of characteristics: no loyalty to brands; a constant search for diversity and newness in products; as well as the pursuit of external validation, attention and admiration. As much as these traits tell us, there's not much known on how narcissists and non-narcissists behave differently in an advertising context. Previous research in this topic is scant, except for Bang, Choi and Lee (2019) who found that individuals that score high on narcissism will pay more attention and have a more favorable behavior or attitude towards "individual level personalized ads rather than group level ads".

Depending on the industry, market or type of product, advertisements have different ways of approaching the final consumers. For example: Givenchy, a luxury brand, will have a different approach, having more adverts with posing models, than Nike, a sports brand, that instead have

models with more natural, candid stances, practicing sports, or tying their sneakers. A candid model might be perceived as authentic and real where a posing model might convey one's best self. Do narcissists versus non-narcissists react differently to these ads? Previous literature shows that narcissistic individuals inflate self-views, perhaps they might want to present their best self to others and strive for something perfect (Buss & Chiodo, 1991). Specifically, narcissists are more likely to use flashy and visibly expensive clothes and wear makeup in order to have a distinct physical appearance, hence attracting more attention from others (Vazire et al., 2008). Plus, narcissists like to present their best-self, almost unrealistic perfect image, being the consumer group that is most influenced by self-image motives (Gregg, Cisek & Hart, 2007). Hence, it is reasonable to predict that narcissists might prefer ads with a posing modeling style compared to the candid style. Non-narcissists, on the other hand, might not be motivated by self-image motives and prefer an authentic portrayal of the endorser. The concept of authenticity itself means real or true, different from everything else and surely not perfect (Cambridge English Dictionary). For non-narcissists, authenticity might be very relevant on their decision making process whether or not to buy a product, as they will feel more related to an ad that shows something natural without being edited. Past research on this is scarce, thus the aim of this research is to understand the relationship between narcissism and consumer responses based on the different endorser's modeling styles presented on the advertisements.

While there are many factors determining how an advertisement looks and consequently the brand itself, the focus in this study was on the endorser's modeling style: looking candid versus posing. As a matter of fact, endorser style might be perceived differently by consumers depending on whether they are narcissists or not. In real life there are many examples of advertisements that use candid models such as Adidas, Levi's, The North Face, Rayban and Converse, while others

use more posed models like Zara, Gucci, Versace, Hugo Boss and Chanel. All the brands mentioned are very well known and are amongst the most profitable retail companies worldwide.

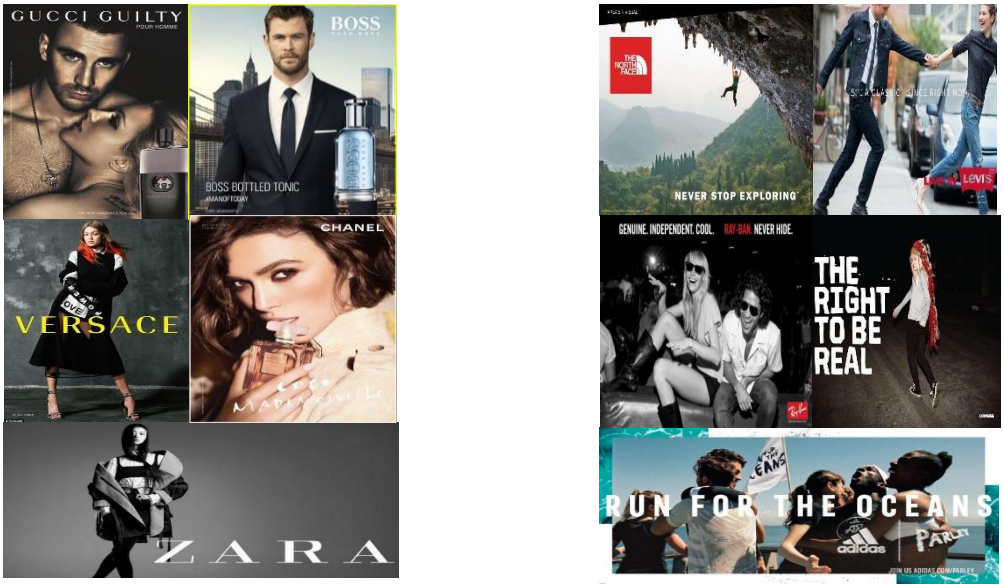


Figure 1. Posing Versus Candid model advertisements.

Theoretically, this research contributes to the literature on narcissism by demonstrating that this trait can influence consumer's perception in an advertising context, affecting purchase likelihood, brand and advertisement evaluation. Practically, since narcissism is an important trait of millennials, understanding how narcissism influence ad evaluation, brand evaluation and purchase likelihood will help companies to better understand millennial segment, who start having a higher purchasing power. Therefore, in the business context, one possible key factor when targeting specific audiences can be the endorser's modeling style in advertisements, more specifically their stance and posture.

2. Literature Review

2.1. Narcissist consumer

Narcissists are “individuals who see themselves, and who want others to see them, as special, superior and entitled, and who are prone to exhibitionism and vanity” (Gregg, Cisek and Hart, 2007). They engage in word of mouth communication “in order to express themselves and attract attention to themselves” (Kkokkoris and Sedikidies, 2019). This group has a higher preference for goods that give them a sense of distinction and uniqueness (Lee, Gregg, and Park, 2013). Therefore, their consumer choices will likely be in line with the same motives. When purchasing goods, this group will “increase their self-esteem by earning others’ attention” (Gregg, Cisek and Hart, 2007). Based on past research, narcissists will show a bigger interest towards “symbolic rather than utilitarian value of products” (Gregg, Cisek and Hart, 2007). Meaning products that “look better than perform better” (Cisek et al., 2014), demonstrating also preference for scarce products (Lee and Seidle, 2012) which in turn provide the consumer with the sense of belonging to an exclusive elite. Clearly, they attribute a higher value to the aesthetics and the “feeling” that comes with the product rather than its functionality. Additionally, when comparing luxury consumer goods, “expensive, impractical and often over functional” with mundane goods, “common looking, affordable and practical”, narcissists will, again, prefer symbolic value products in order to enhance their self-motives (Cisek et al., 2014). According to Naderi and Paswan (Naderi and Paswan, 2016), there is no differentiation between narcissists and non narcissists regarding their perception of product quality, even though narcissists will give more importance to store image than the product price. On the contrary, for non-narcissistic consumers, price is more critical when deciding whether or not to buy the product. Narcissism influences the way people evaluate a product’s symbolic value as it leads these consumers into making decisions regarding store value, over price (Naderi and Paswan, 2016). Narcissists base their decision in

four interrelated reasons. The first one is associated with the "desire for individualization and of being unique or different, feeling privilege". The second reason concerns materialism, "symbolic product purchasing indicates financial success, wealth and power". Thirdly, "symbolic purchasing contributes to perceptions of life as significant and meaningful". Lastly related to sexual signaling "symbolic product purchasing tends to increase consumer's sexual appeal" (Sedikides et al., 2017). Another key aspect of a narcissistic consumer is the fact that they are prone buy on impulse, more than the average consumer (Harnish and Bridges, 2015). Furthermore, consumer choices will lead to an increase of thought about themselves, causing an increase on the level of narcissism. Based on these authors narcissism "can be treated as a state that is temporarily elevated in a consumer context" (Kkokkoris & Sedikidies, 2019). Taken together, narcissists and non narcissists reveal different behaviors in their consumption patterns, that might be because they have different motivations. Therefore they might be driven by different goals. The next section discusses how narcissism might influence individual's goal, either an authenticity or impression management goal.

2.2. Relation between Narcissism and Impression Management Goal & Authenticity Goal

Based on Encyclopedia of Philosophy, an **authentic** person is described as someone "who acts in accordance with desires, motives, ideals or beliefs that are not only hers (as opposed to someone else's), but that also express who he/she really is" (Stanford Encyclopedia of Philosophy). The word "authentic" itself refers to anything that is original and not copied. Also, Collins defines authenticity as a "quality of genuineness, real and not of doubtful origin, while inauthenticity equals turning away from or denying the givens of existence" (Collins, 1997). Cohn and Wolfe showed "that people relate brand authenticity with words like honest, transparent, fair, responsible

and accountable" (Cohn and Wolfe, 2014). Accordingly to Goffman, the desire for authenticity and the need for social approve causes a serious problem on an individual (Goffman, 1998). The previous author also gave an example present in the workplace, where "people are less fiercely committed to being authentic, and more willing to engage in impression management for strategic purposes such as keeping one's job."(Goffman, 1998). By assuming that some degree of authenticity is achievable, will it then be desirable? Leading this research to a new concept, impression management goal. The term **impression management** "came to be associated with the production of coherent sets of behaviors that would lead others to infer a corresponding private self that may or may not exist. For example, the motivation to be liked might encourage overt behaviors"(Mets & Grohskopf, 2008). Due to "other's perceptions in social interaction, we should not be surprised that people keep an eye on how others regard them and from time to time, try to control the impressions people have of them"((Leary & Kowalski, 1990). The process that arises from controlling how one is perceived by another person is named as self-presentation. The main goal of self-presentation is "not to be perceived positively but so influence other people to respond in desired ways" (Leary & Kowalski, 1990). The two concepts, authenticity goal and impression management goal are different from each other, and also, one does not imply the other since "it is possible to engage in impression management behaviors without authenticity being at stake" (Goffman, 1998).

Past research shows that narcissists want to present their best or perfect self (Gregg, Cisek & Hart, 2007) referring to the impression management as their goal. Hence, when looking at the narcissistic consumer behavior, one may notice that it is a "coping strategy to compensate for their self-doubts and insecurities" (Cisek et al., 2014). It is proved that narcissistic people's level of self-esteem and affection changes more frequently, meaning, fluctuates more, compared to

those less narcissistic (Zuckerman & O'Loughlin, 2009). Concluding by saying that non narcissists in comparison to narcissists have higher self-esteem (Gregg and Sedikides, 2010), therefore having their goal more in line in what is authentic, natural and real.

When comparing a posing endorser's modeling style with a candid one, narcissists versus non narcissists are expected to prefer the posed one. As discussed before, narcissists tend to show to others their best self (Gregg, Cisek & Hart, 2007) and this because of impression management goal. While for non narcissists, it can be predicted that they might prefer a more candid endorser's modeling style, due to the authenticity goal.

3. Hypotheses

The following hypotheses were formalized:

H1a*: Narcissists evaluate ads featuring a posed (versus candid) endorser more positively*

H1b: *Narcissists evaluate a brand in ads featuring a posed (versus candid) endorser more positively*

H1c: *Narcissists have a higher purchase likelihood for a product featuring a posed (versus candid) endorser*

H2a: *Non-narcissists evaluate ads featuring a candid (versus posed) endorser more positively*

H2b: *Non-narcissists evaluate a brand in ads featuring a candid (versus posed) endorser more positively*

H2c: *Non-narcissists have a higher purchase likelihood for a product featuring a candid (versus posed) endorser*

H3a: *Narcissists' favorable responses to ads featuring a posed (versus candid) model is caused by their impression management goal*

H3b: *Non-narcissists' favorable responses to ads featuring a candid (versus posed) model is caused by their authenticity goal*

Figure 2 illustrated the conceptual framework used in this research.

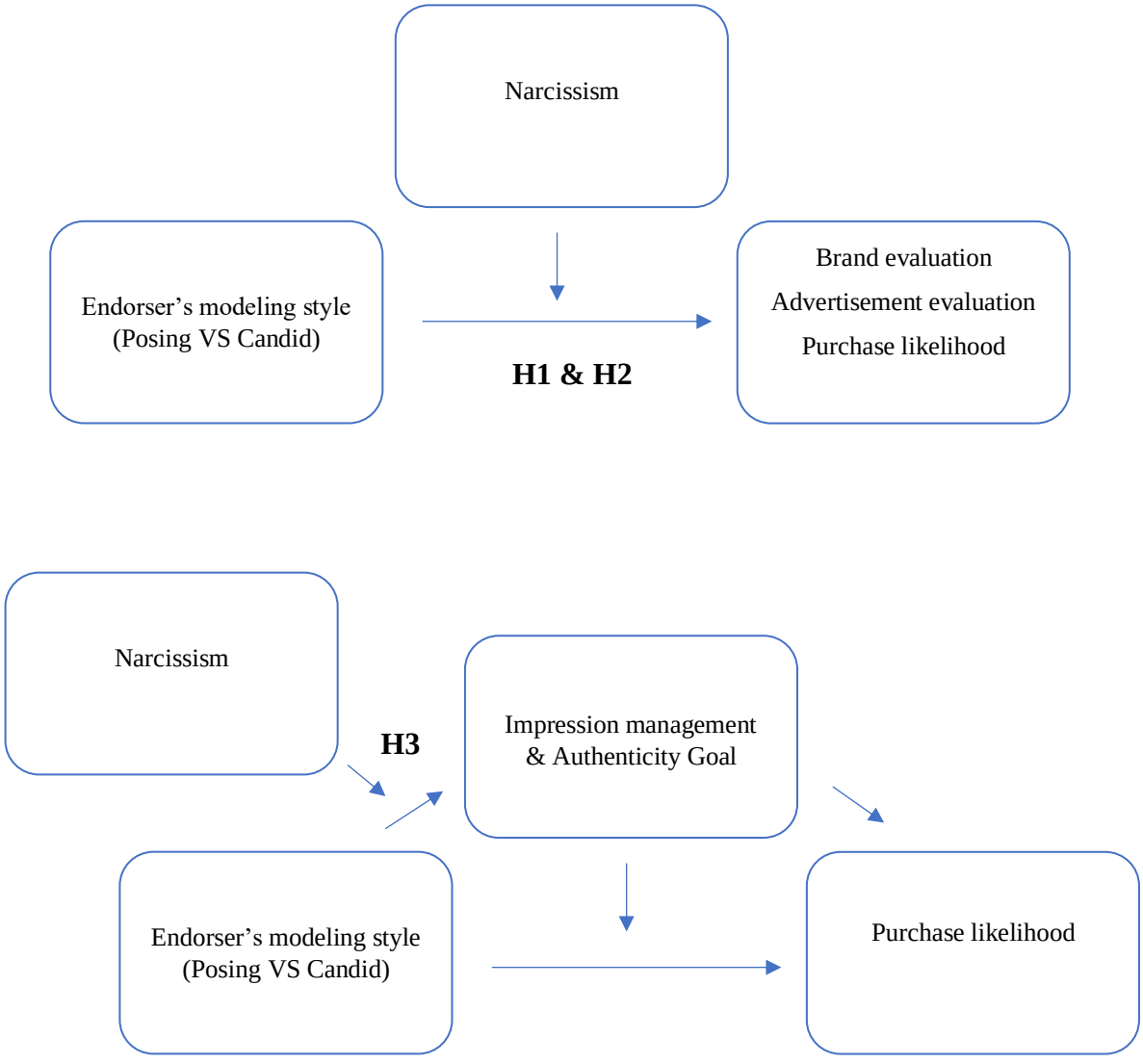


Figure 2. Conceptual framework

4. Pre-test

4.1. Methodology

The purpose of this pre-test was to select two adverts, one where the model is more clearly posing and portrayed with a more artificial modeling style, showing their most perfected self, and a second one, where the model appears more natural, candid and authentic.

4.1.1. Sample

The pre-test sample consisted of 31 participants (N=31). Age distribution indicates 65% of the respondents between [20-25] years old and 35% between [26-35] years old. For gender distribution, 49% were males and 51% females.

4.1.2. Design and Procedure

The pre-test aimed to choose two advertisements out of five[1], where participants could give their opinions regarding the endorser's modeling style. Two of them (ads 1 & 3) show a posing endorser modeling style, and the other three a more natural stance endorser (ads 2, 4 & 5). Regarding the posing ad, the photo was edited in photoshop (light, face color, fragrance spray effect changes) trying to make the picture as best looking as possible. Whereas the candid picture was not edited to give it a more authentic look. Model, product advertised, and location were kept constant for all the different advertisements.

The product used was a fragrance called "*Si*". This product was chosen, rather than, for example, an Apple iPhone or a Microsoft Surface, in order to eliminate the brand bias that comes along with brands that people might be familiar with. The survey had the same seven questions[2] for each advert (five adverts in total) and each participant had to choose an answer out of a 7-point

[1] Appendix 1.1
[2] Appendix 1.2

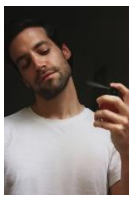
scale based on their agreeability with the questions/statements (1-“Strongly disagree”; 7-“Strongly agree”). The pre-test measured individual opinions regarding a posing versus candid endorser modeling style by asking them if they think the endorser in the ad was posing, natural, authentic or showing his best self. All the variables (Posing, Natural, Candid, Authentic, Posed appearance, Artificial and Candid picture) used are continuous.

4.2. Analyses and results

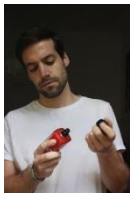
Paired sample t-test was used to determine if the mean difference between two observations is zero. The analysis includes ten combinations tested, since all the ads provided (five) were compared.

Table 1 (created from the results found on SPSS[3]) summarized the result of the pre-test. Specifically, ads 1 & 2 (pair 1) and ads 1 & 4 (pair 3) were considered statistically significant to have different endorser modeling styles for all conditions ($p < 0.05$). Following this, and in order to choose one set of ads, a mean analysis[4] was performed to analyze which ad had the highest mean for the posing model style and the highest mean for candid model style. Finally, set of ads 1 & 2 (pair 1) was chosen (see Figure 3) because both ads were clearly different from each other. Ad 1 was rated to be more candid, natural and less posing, while ad 2 the opposite, more posing and less candid. When comparing ad 2 and ad 4, ad 2 was rated to be more natural, candid, authentic, less posing and less artificial.

[3] Appendix 6.1
[4] Appendix 6.2



Ad 1



Ad 2

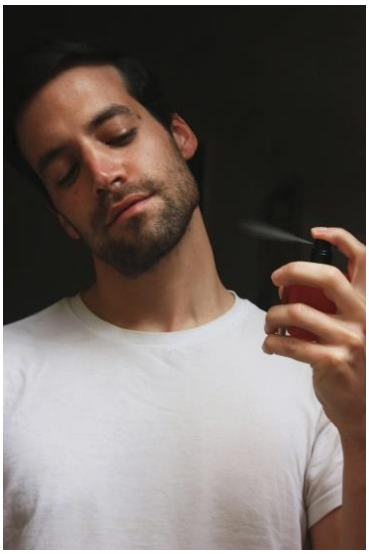
Ad 3

Ad 4

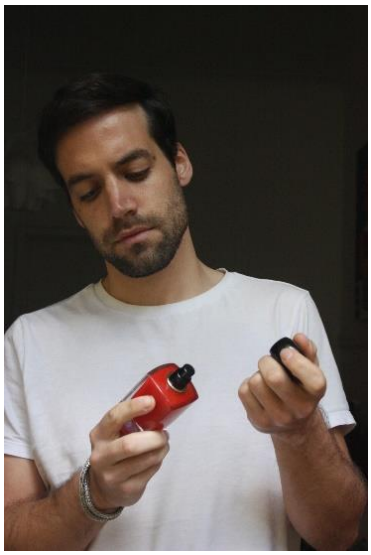
Ad 5

Combinations	(Ads 1&2)	(Ads 1&3)	(Ads 1&4)	(Ads 1&5)	(Ads 2&3)	(Ads 2&4)	(Ads 2&5)	(Ads 3&4)	(Ads 3&5)	(Ads 4&5)
P-value < 0.05	Pair 1	Pair 2	Pair 3	Pair 4	Pair 5	Pair 6	Pair 7	Pair 8	Pair 9	Pair 10
Posing	x		x		x	x	x	x		x
Natural	x		x		x		x	x		x
Candid	x		x		x		x	x		x
Authentic	x		x		x	x	x		x	x
Posed appearance	x		x		x		x	x		x
Artificial	x	x	x							
Candid picture	x		x		x		x	x		x

Table 1. Comparison of pairs of photo across measures in pre-test



Ad 1: Posing



Ad 2: Candid

Figure 3. Selected Posing VS Candid Advertisement.

5. Main test

5.1. Methodology

5.1.1. Sample

The sample in the main test consisted of 160 participants (N=160). The most representative age interval is between [20-24] years old with 64% of the population, age interval [25-29] years old with 29%, [30-34] years old with 6% and finally [35+] years old with 1% of the participants. The gender distribution shows 43% males, 56% females and 1% prefer not to disclose. This last sample was randomly assigned to guarantee the same number of participants in each two groups (Posing VS Candid). The participants that answered the first survey (pre-test) did not answer the second one.

5.1.2. Design and Procedure

This study employed a 2 (posed vs. candid, manipulated) X 2 (high vs. low narcissism, measured) between-subjects design. Participants were assigned randomly one of the two conditions, posing advertisement versus candid advertisement. These two adverts were chosen based on the pre-test. The survey was divided in three parts. The first[5] part was about their perception and opinion of the advertisement, brand and if they would consider buying the product. In the second[6] part, impression management and authenticity goal were measured, and finally, on the third[7] part, narcissism was measured using the "NPI 16 scale" (Ames, Rose, and Anderson, 2006).

In the following, each measure included in the study will be described in details.

[5] Appendix 2.1
[6] Appendix 2.2
[7] Appendix 2.3

Advertisement evaluation measure. For each advertisement, participants were asked to rate the ad on five items (bad/good, negative/positive, undesirable/desirable, dislike/like, unfavorable/favorable) on a 7-point scale. The average of the five items served as ad evaluation index.

Brand evaluation measure. Participants were asked to rate the brand featured in the ad on five items (negative/positive, undesirable/desirable, favorable/unfavorable, like/dislike, bad/good) on a 7-point scale. Similarly to ad evaluation, brand evaluation was also calculated by the average of the five items.

Purchase Likelihood. This question was asked to better understand if the product advertised was appealing enough to be purchased. Participants indicated on a 7-point Likert scale if they were likely or not likely to purchase de fragrance (1- "Not likely at all"; 7- "Very likely").

Impression management & Authenticity Goal. As discussed earlier, narcissists might prefer ads with posed (vs. candid) endorsers as they pursue an impression management goal, whereas non-narcissists might prefer ads with candid (versus posed) endorsers as they hold authenticity goal. To test this prediction, impression management goal was measure with two items ("best-self", "perfectionism") and authenticity goal was measure with two items ("naturality", "authenticity"). Participants indicated their opinion on a 7-point Likert scale (1- "Not at all"; 7- "Very much").

Narcissism scale. Narcissism was measured using a short 16-item[8] form of the "Narcissistic Personality Inventory" (Ames, Rose, and Anderson, 2006). This is validated and approved measure of non-pathological narcissism. It is a "forced-choice measure" that includes items such as "People sometimes believe what I tell them" and "I can make anybody believe

[8] Appendix 3

anything I want them to" and its only possible to select one option out of two. This scale was created to understand to what extent people "exhibit a grandiose sense of self, feelings of entitlement, lack of empathy for others, and an exploitative interpersonal style" (Ackerman et al. 2011). The scale range is between [1- "lowest level of narcissism"; 2- "highest level of narcissism] and the narcissism level for each participant is the average of all 16 questions answered.

Demographic variables. Participants' gender and age were recorded. Since the product advertised might be more appealing to one gender than another, gender will be used as a control variable in the analysis. Regarding age, since the study is focuses on millennials and all the participants are inside this age range, it is not included as a control variable.

5.2. Data analyses

5.2.1. Outliers

The software used to calculate and analyze the data was SPSS. Based on the boxplot[9] two outliers (participants numbered 140 and 130) were excluded for the analyses on purchase likelihood . These ID variables were removed because they are located outside of the boxplot, being SPSS outliers (Pallant, 2011). For ad evaluation and brand evaluation, there was no outlier. Thus, the sample size when purchase likelihood is a dependent variable is 158 (N=158), otherwise it's always 160 (N=160).

5.2.2. Reliability Analysis

An analysis was conducted to test the reliability of the scale measuring advertisement evaluation, brand evaluation, impression management goal, authenticity goal, and narcissism. Standing upon what DeVellis (2003) considers, Cronbach's alpha should be bigger than 0.7, although values that

[9] Appendix 4

are superior to 0.8 are even better to prove model reliability. All the cases[10] except for impression management goal measure[11] (with a Cronbach's alpha equal to 0.78) always presented a Cronbach's alpha above 0.8, which means an optimal result.

5.3. Main Analyses

5.3.1. PROCESS by Andrew F. Hayes

As described above, the experiment conducted includes four independent variables: narcissism which is a continuous variable; endorser's modeling style which represents a categorical variable split into two groups: posing model and candid model; impression management goal and authenticity goal measure, being these last two continuous variables; and three dependent variables: advertisement evaluation; brand evaluation; purchase likelihood, being all the latter considered continuous variables.

5.3.2. PROCESS: Results and Analysis

5.3.2.1. Moderation Analysis

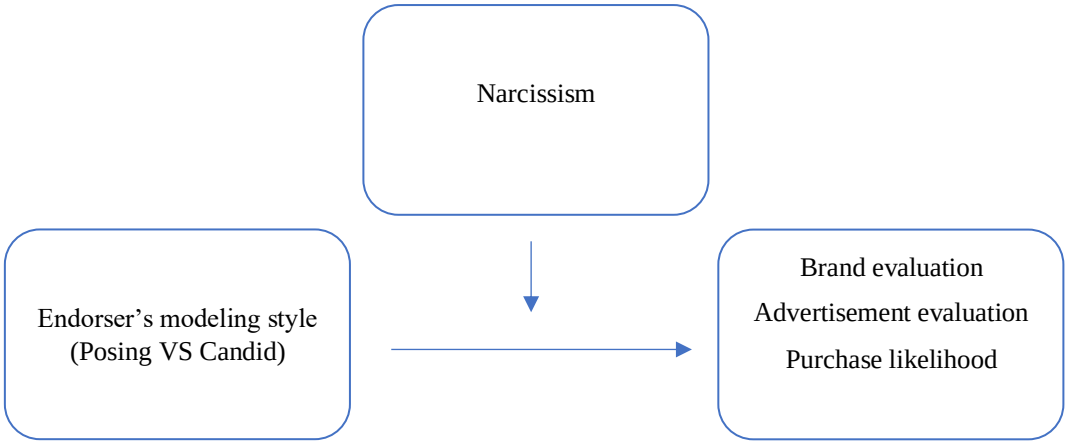


Figure 4. Moderation analysis model 1 (Hayes 2013).

[10] Appendix 5.2
[11] Appendix 5.1

To test the predicted model, a moderation analyses was conducted using Hayes' PROCESS (model 1), with endorser style (candid versus posed) as the independent variable, narcissism as the moderator, and ad evaluation, brand evaluation, and purchase likelihood as dependent variables. Moreover, gender was included as a covariate (as explained above).

Ad evaluation. Results show no significant main effect of candid versus posed[12](β = 1.37, 95% C.I. (-2.49; 5.23), *p* = 0.49), no significant main effect of narcissism[13](β = 0.08, 95% C.I. (-2.25; 2.42), *p* = 0.94) and no significant interaction of endorser style and narcissism (β = -0.46, 95% C.I. (-3.48; 2.56), *p* = 0.76).

***Brand evaluation*.** Similar to ad evaluation, results show no significant main effect of candid versus posed[14](β = -1.78, 95% C.I. (-5.60; 2.04), *p* = 0.36), no significant main effect of narcissism[15](β = -1.31, 95% C.I. (-3.62; 1.01), *p* = 0.21) and no significant interaction of endorser style and narcissism (β = 1.91, 95% C.I. (-1.09; 4.90), *p* = 0.21).

Purchase likelihood. Results revealed a marginally significant effect of endorser style (candid versus posed)[16](β = -3.29, 95% C.I. (-7.03; 0.45), *p* = 0.08), a significant main effect of narcissism[17](β = -2.64, 95% C.I. (-4.91; -0.36), *p* = 0.02), and importantly, a significant interaction of endorser style and narcissism (β = 3.16, 95% C.I. (0.23; 6.09), p= 0.034). Looking at the *figure 5* we can take some conclusions. Specifically, at a high level of narcissism, purchase likelihood is lower when the endorser style is candid (vs. posed) (β= 1.25, 95% C.I.(0.59; 1.91),

[12] Appendix 7.2
[13] Appendix 7.2
[14] Appendix 7.3
[15] Appendix 7.3
[16] Appendix 7.1
[17] Appendix 7.1

p= 0.0002). In contrast, at a low level of narcissism, there was no significant effect; purchase likelihood is not different between candid and posed condition (β= 0.26, 95% C.I.(-0.34; 0.87), p= 0.39). These results demonstrated that purchase likelihood of an advertised product differ between a candid and posed endorser, depending on the individual's level of narcissism. Specifically, individuals with high level of narcissism demonstrated lower purchase likelihood when the endorser's modeling style is candid (vs. posed). In contrast, individuals with lower level of narcissism demonstrated similar purchase likelihood, no matter what style of the endorser is.

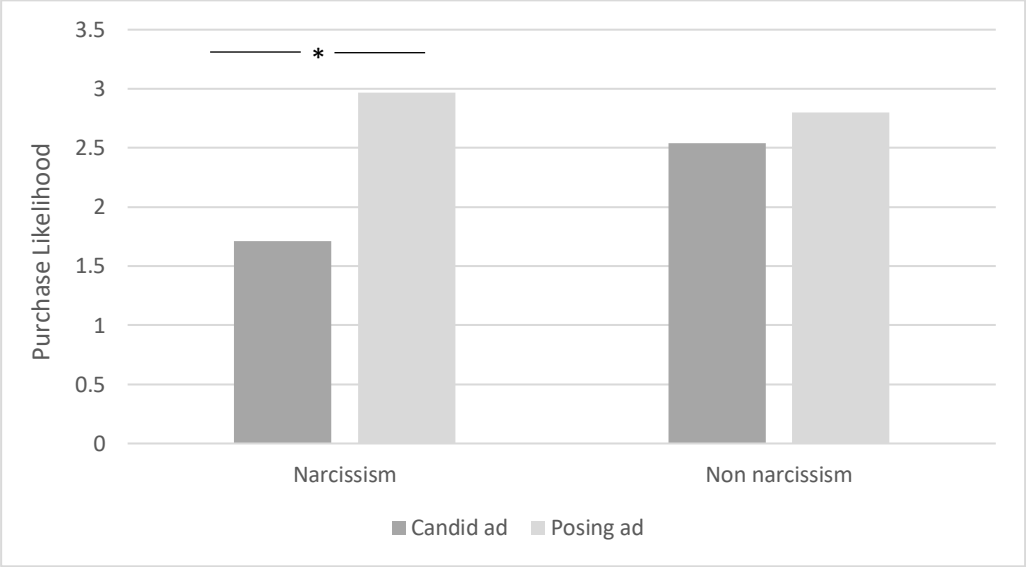
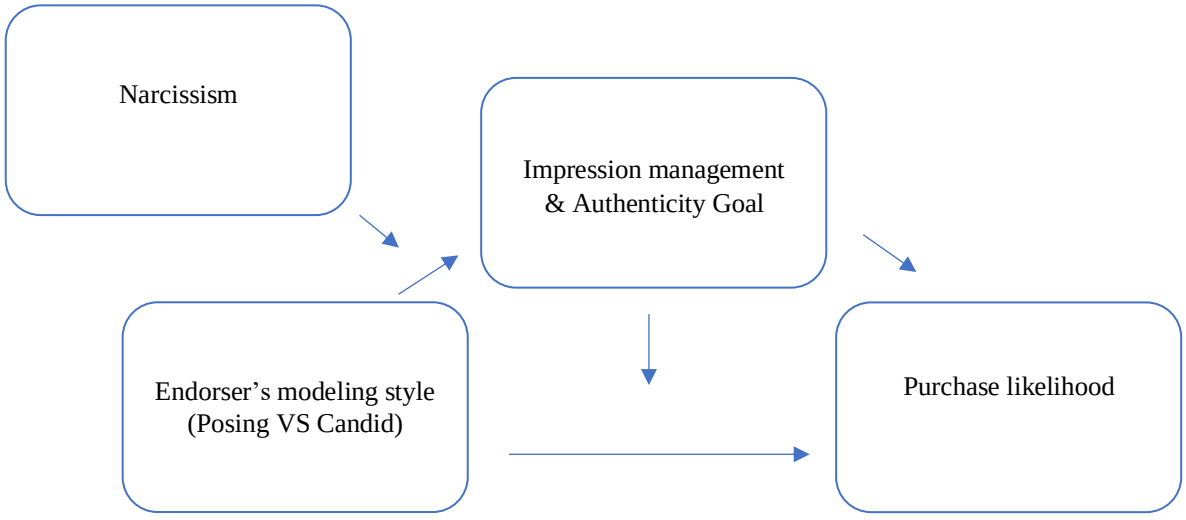


Figure 5. Narcissists versus Non narcissists & Posing versus Candid ad when dependent variable is likelihood to buy

To further understand the interaction effect of endorser style (candid or posed) and narcissism on purchase likelihood, an additional moderation analysis was conducted. The analysis above showed that narcissists are less likely to purchase the advertised product when the endorser style is candid (vs. posed), and that non-narcissists on the other hand showed no difference. However,

it is unclear how narcissists versus non-narcissists' purchase likelihood differ for each type of ad (posed vs. candid). Thus, a moderation analysis using Hayes' Process (model 1) was conducted with narcissism as the independent variable, endorser style (candid vs. posed) as the moderator, and purchase likelihood as the dependent variable. Again, gender is included as a covariate. Results[18] showed that when the endorser style is candid, there is a negative effect of narcissism on purchase likelihood (β = -2.64, 95% C.I. (-4,91; -0,36), p = 0.02). Also looking again at *figure 5* above, the higher the level of narcissism is, the lower the purchase intention. On the other hand, when the endorser style is posed, narcissism had no significant effect on purchase intention (β=0.52, 95% C.I. (-1.34; 2.39), p = 0.58). Thus, this additional analysis further showed that for the candid ad, the higher is the level of narcissism the lower will be the purchase likelihood, meaning narcissists have a lower purchasing likelihood than non narcissists in that case. On the other hand, a posed endorser does not influence purchase likelihood of narcissists and non-narcissists differently.

5.3.2.2.Moderated Mediation Analysis



[18] Appendix 8

Figure 6. Statistical Diagram. Moderator and Mediator model 7 (Hayes 2013).

To test the role of impression management and authenticity goal as underlying mechanisms, a moderated mediation analysis was conducted using Hayes' Process (model 7). Endorser style (candid vs. posed) was included as an independent variable, narcissism as a moderator, purchase intention as the dependent variable, and impression management goal and authenticity goal as mediators. Again, gender is included as a covariate. Results[19] show that the interaction of endorser style (posed vs. candid) and narcissism was not significant on authenticity goal (β = -.74, 95% C.I. (-4,07; 2.58), p = 0.66) as well as impression management goal (β = -.70, 95% C.I. (-3,71; 2.32), p = 0.65). Overall, the moderated mediation was not significant (β = -.18, SE = .43, 95% C.I. (-.95, .82)). Thus, we cannot conclude that impression management and authenticity goals underlie the effect observed in this study.

6. General Discussion

6.1. Summary of findings

From the first analysis, it can be concluded that individuals with higher levels of narcissisms (narcissists) will decrease their purchase likelihood for the advertisement with a candid endorser modeling style versus the posing one. Although for individuals with lower levels of narcissism (non narcissists) no effect is statistically proved. Furthermore, there is also no effect between endorser modeling style & brand evaluation or advertisement evaluation. Plus, by looking at the second analysis, when the model has a candid modeling style, narcissists showed lower levels of

[19] Appendix 9

intentions to buy the product (purchase likelihood was lower) in comparison to non narcissists. For the posing modeling style advert, there is no effect statistically proven.

Additionally, authenticity goal and impression management goal do not explain what is causing this effect, meaning, what explains the relationship between endorser modeling style and purchase likelihood remains unknown. An alternative explanation for what was proven before, is that narcissists, whenever looking at an advertisement with a more natural style, might feel jealous and think "out loud" in their head, how can someone (in this case, the endorser) can look naturally good? Leading to a decrease in their purchase likelihood. One of the reasons that might explain the lack of significance for brand evaluation is that in order to judge a brand, looking at one advertisement can be considered not enough to understand the brand's missions and values.

6.2. Managerial implications

According to these findings, some managerial recommendations are worth the attention. This research proved that in the presence of an advertisement portraying a model in a more natural stance, individuals that score high on levels of narcissism will less likely buy the product advertised. Also narcissists, when compared to non narcissists, like candid modeling style less, meaning something about candid modeling style does not speak to the narcissist consumer. Marketeers and managers can take this conclusion and apply it in their practical business models. Looking at the marketing perspective, the tighter and the more direct your target strategy is, the more effective it will be and better results you'll achieve. If a company is targeting the Millennial generation, who, based on previous research, score higher as narcissists (Metz, 2000), and the company is focused on increasing their sales, the right advertisement shouldn't portray a model in a more natural stance. As concluded before, narcissists won't be more likely to buy a product when seeing a more natural endorser modeling style. This conclusion shows that individual's

perceptions impact their purchase likelihood. Companies should look at this feature - endorser's modeling style - as a key element that will have a direct impact on their sales and consequently on the overall business profit. Whereas, regarding the advertisement with a posed model, no effects could be seen.

7. Limitations and Future Research

Starting with the advertisement pictures. The product itself, as well as the model, are a limitation, since different models or different products might lead to different outcomes. In this case, the fragrance seemed to be the best fit for both genders and for the sample age range. Although an advertisement for a fragrance will be different from an advertisement for a chocolate bar, vacations or even a car. The type of product might be more appealing to some participants than others. In the future, more studies should follow this logic in order to test for different types of products, analyzing if the results are the same for a fragrance and a car for example. In this study, it was just tested the endorser's modeling style, but there are many other characteristics that can also sway a narcissist's purchase likelihood: brand commitment, word of mouth communication, feedback received by their peers, price, exclusiveness of the product, usefulness, trends. The fact that the model is male might also present a limitation and further change the orientation of the study. Still regarding the advertisement pictures, in the survey it was not asked if people already knew the product advertised, which means, their knowledge of the product as well as its advantages/disadvantages and feedback received (word of mouth communication) might have implications on their perceptions. Culture is another limitation, since the respondents belong to western countries, future research in Asian or African countries should be carried out in order to eliminate possible culture bias.

In order to, more accurately, measure narcissism, instead of using the short measure of narcissism (NPI 16), it would have been more precise to use the complete measure of 40 items questions, in order to tackle, in further detail, the personality of each individual.

In conclusion, research on this topic in non-existent, and information for its basis is scarce. Consequently, it might be too soon to generalize the findings of this study, but, nevertheless, these results represent a good guide for future research to take into account, along with all the limitations presented. These results can be the first step to understand, in a deeper way, what is causing the relationship of an individual's narcissism and its perception of the brand, advertisement and ultimately the purchase likelihood of the product advertised.

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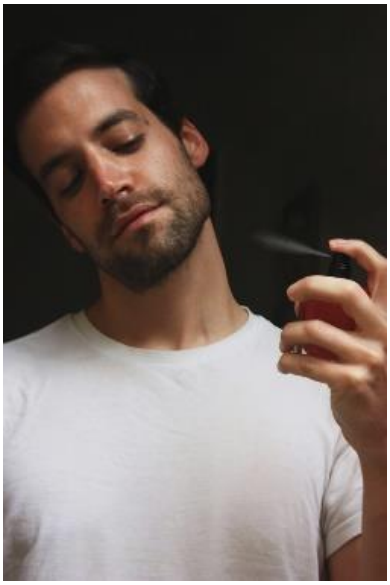
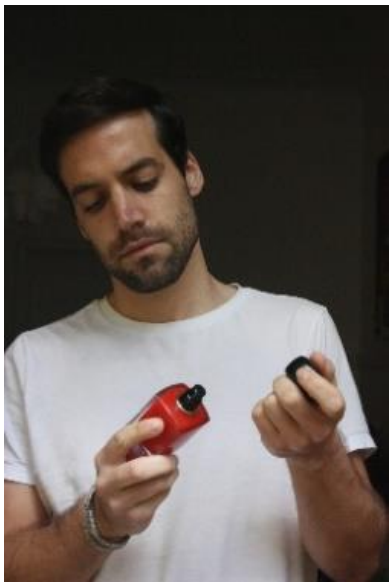
9. Appendices

Appendix 1. Pre-test survey

Appendix 1.1 Advertisements presented in the survey



Ad 1



Ad 2

Ad 3

Ad 4

Ad 5

Appendix 1.2 Pre-test survey questions

In this ad, the model is posing:

1						7
Strongly disagree	2	3	4	5	6	Strongly agree

In this ad, the model looks natural:

1						7
Strongly disagree	2	3	4	5	6	Strongly agree

In this ad, the model looks candid (i.e. meaning the subject captured does not have a posed appearance):

1						7
Strongly disagree	2	3	4	5	6	Strongly agree

In this ad, the model seems authentic:

1						7
Strongly disagree	2	3	4	5	6	Strongly agree

In this ad, the model has a posed appearance:

1						7
Strongly disagree	2	3	4	5	6	Strongly agree

In this ad, the model seems artificial:

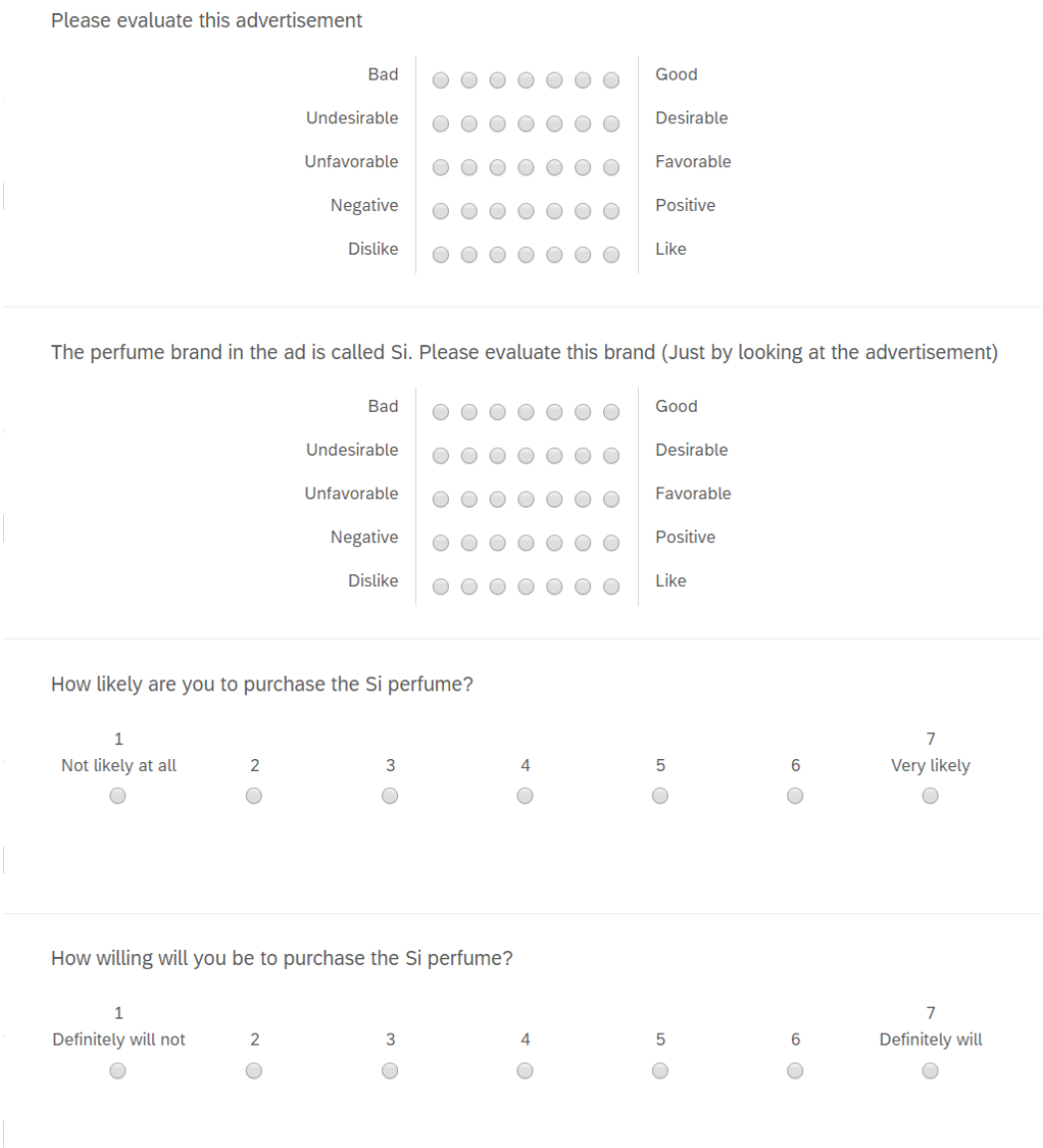
1						7
Strongly disagree	2	3	4	5	6	Strongly agree

This is a candid picture (i.e. meaning the picture was captured without creating a posed appearance):

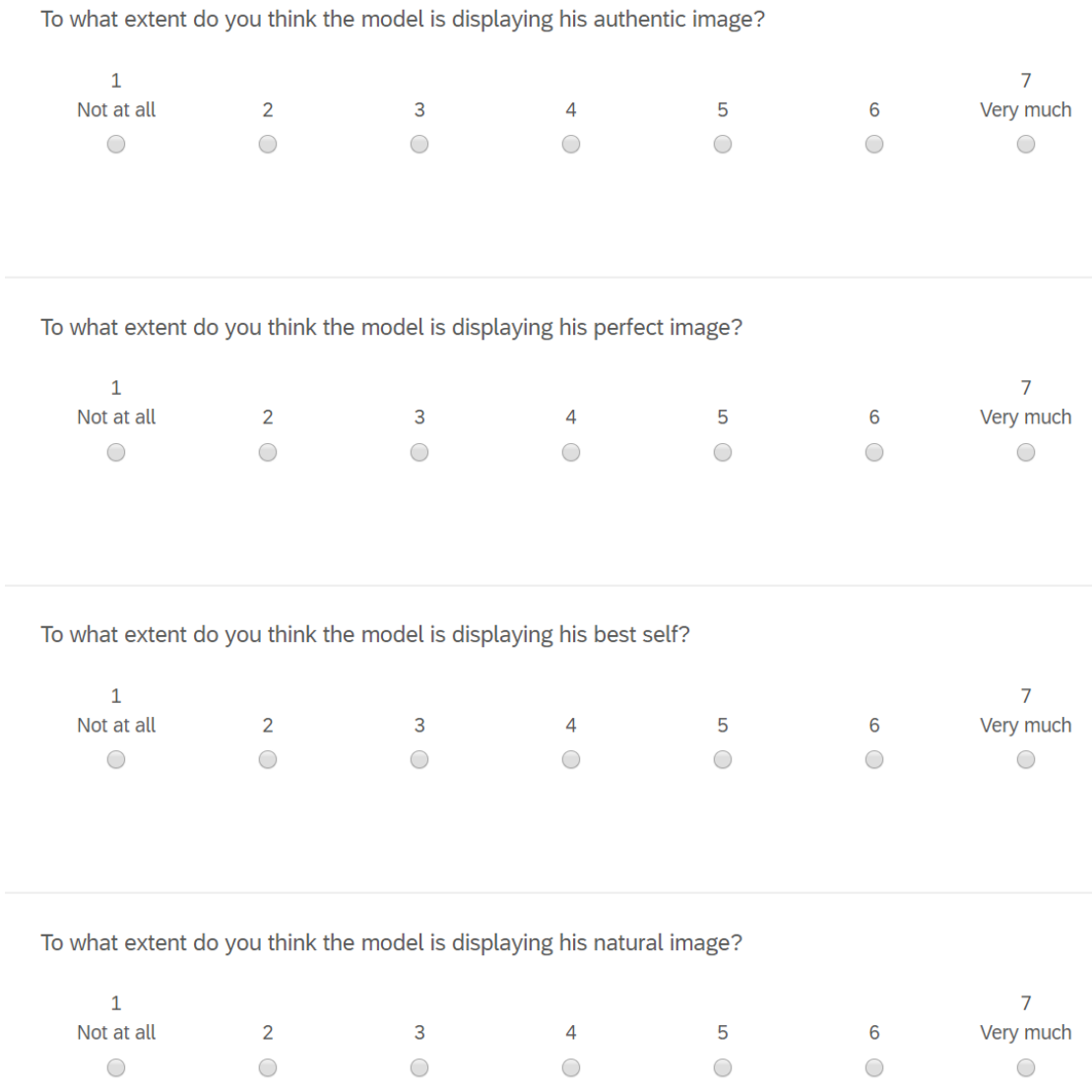
1						7
Strongly disagree	2	3	4	5	6	Strongly agree

Appendix 2. Real test survey

Appendix 2.1 First part of the survey: advert, brand evaluation and purchase likelihood



Appendix 2.2 Second part of the survey: Authenticity and impression management goal



Appendix 2.3. Third part of the survey: Narcissism level

Please select the option that most identifies with you

- When people compliment me I sometimes get embarrassed
- I know that I am good because everybody keeps telling me so

Please select the option that most identifies with you

- I prefer to blend in with the crowd
- I like to be the center of attention

Please select the option that most identifies with you

- I am no better or worse than most people
- I think I am a special person

Please select the option that most identifies with you

- I don't mind following orders
- I like having authority over people

Please select the option that most identifies with you

- I don't like it when I find myself manipulating people
- I find it easy to manipulate people

Please select the option that most identifies with you

- I usually get the respect that I deserve
- I insist upon getting the respect that is due me

Please select the option that most identifies with you

- Being an authority doesn't mean that much to me
- People always seem to recognize my authority

Please select the option that most identifies with you

- I hope I am going to be successful
- I am going to be a great person

Please select the option that most identifies with you

- People sometimes believe what I tell them
- I can make anybody believe anything I want them to

Please select the option that most identifies with you

- There is a lot that I can learn from other people
- I am more capable than other people

Please select the option that most identifies with you

- I am much like everybody else
- I am an extraordinary person

Please select the option that most identifies with you

- I try not to be a show off
- I am apt to show off if I get the chance

Please select the option that most identifies with you

- Sometimes I am not sure of what I am doing
- I always know what I am doing

Please select the option that most identifies with you

- Sometimes I tell good stories
- Everybody likes to hear my stories

Please select the option that most identifies with you

- I like to do things for other people
- I expect a great deal from other people

Please select the option that most identifies with you

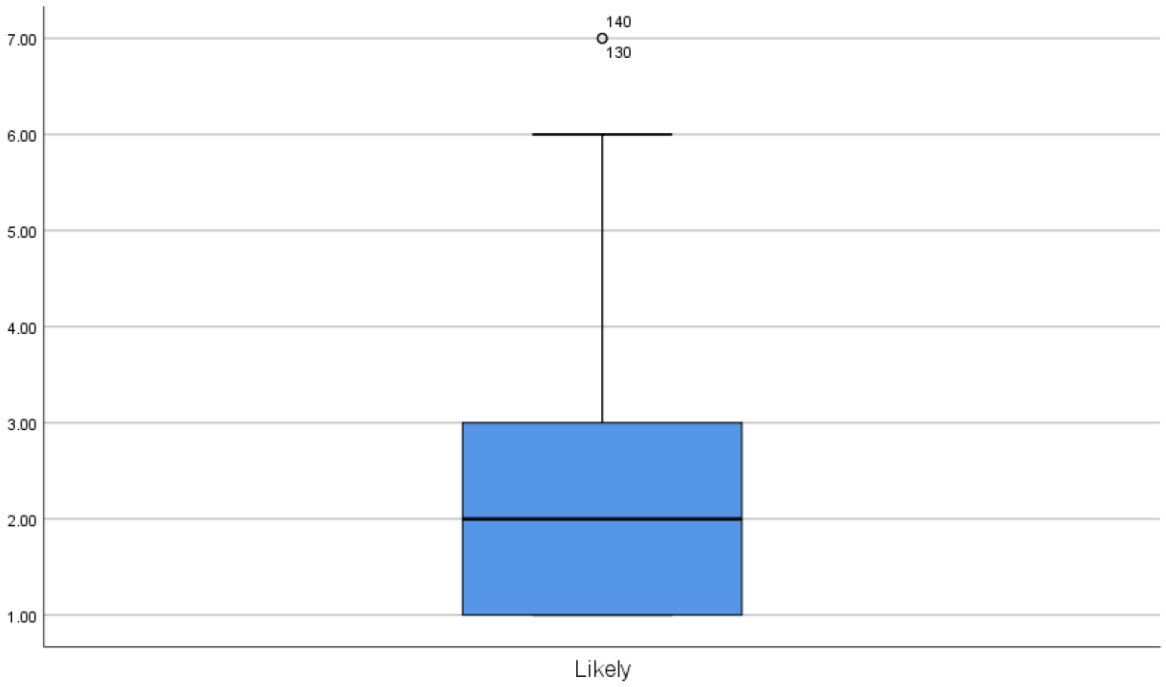
- It makes me uncomfortable to be the center of attention
- I really like to be the center of attention

Appendix 3. "Narcissistic Personality Inventory", NPI 16

16-item pair measure of narcissism

Narcissistic response	Non-narcissistic response	NPI-40 item
I know that I am good because everybody keeps telling me so	When people compliment me I sometimes get embarrassed	4
I like to be the center of attention	I prefer to blend in with the crowd	7
I think I am a special person	I am no better or nor worse than most people	9
I like having authority over people	I don't mind following orders	12
I find it easy to manipulate people	I don't like it when I find myself manipulating people	13
I insist upon getting the respect that is due me	I usually get the respect that I deserve	14
I am apt to show off if I get the chance	I try not to be a show off	20
I always know what I am doing	Sometimes I am not sure of what I am doing	21
Everybody likes to hear my stories	Sometimes I tell good stories	23
I expect a great deal from other people	I like to do things for other people	24
I really like to be the center of attention	It makes me uncomfortable to be the center of attention	30
People always seem to recognize my authority	Being an authority doesn't mean that much to me	32
I am going to be a great person	I hope I am going to be successful	34
I can make anybody believe anything I want them to	People sometimes believe what I tell them	35
I am more capable than other people	There is a lot that I can learn from other people	39
I am an extraordinary person	I am much like everybody else	40

Appendix 4. Outliers



Appendix 5. Reliability Analysis

Appendix 5.1. Impression Management variables

Reliability Statistics

Cronbach's Alpha	N of Items
.778	2

```
RELIABILITY
  /VARIABLES=med_bestself med_perf
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.
```

Appendix 5.2. Brand evaluation, Advertisement evaluation & Authenticity goal

Reliability Statistics

Cronbach's Alpha	N of Items
.940	5

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RELIABILITY
  /VARIABLES=brand_eval_1 brand_eval_2 brand_eval_3 brand_eval_4 brand_eval_5
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.
```

Reliability Statistics

Cronbach's Alpha	N of Items
.952	5

```
RELIABILITY
  /VARIABLES=advert_eval_1 advert_eval_2 advert_eval_3 advert_eval_4 advert_eval_5
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.
```

Reliability Statistics

Cronbach's Alpha	N of Items
.952	5

```
RELIABILITY
  /VARIABLES=med_authe med_natural
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.
```

Appendix 6. Pre-test results

Appendix 6.1 Mean difference of all variables

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	(1) Posing - (2) Posing	2.581	1.876	.337	1.893	3.269	7.660	30	.000
Pair 2	(1) Posing - (3) Posing	-.032	1.741	.313	-.671	.606	-.103	30	.919
Pair 3	(1) Posing - (4) Posing	1.548	1.823	.327	.880	2.217	4.730	30	.000
Pair 4	(1) Posing - (5) Posing	.258	2.016	.362	-.481	.998	.713	30	.482
Pair 5	(2) Posing - (3) Posing	-2.613	2.654	.477	-3.586	-1.639	-5.481	30	.000
Pair 6	(2) Posing - (4) Posing	-1.032	2.442	.439	-1.928	-.136	-2.353	30	.025
Pair 7	(2) Posing - (5) Posing	-2.323	2.676	.481	-3.304	-1.341	-4.833	30	.000
Pair 8	(3) Posing - (4) Posing	1.581	2.277	.409	.745	2.416	3.865	30	.001
Pair 9	(3) Posing - (5) Posing	.290	1.829	.329	-.381	.961	.884	30	.384
Pair 10	(4) Posing - (5) Posing	-1.290	2.425	.436	-2.180	-.401	-2.963	30	.006

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	(1) Natural - (2) Natural	-1.452	1.981	.356	-2.178	-.725	-4.081	30	.000
Pair 2	(1) Natural - (3) Natural	.097	2.286	.410	-.742	.935	.236	30	.815
Pair 3	(1) Natural - (4) Natural	-1.161	2.311	.415	-2.009	-.314	-2.798	30	.009
Pair 4	(1) Natural - (5) Natural	-.065	2.128	.382	-.845	.716	-.169	30	.867
Pair 5	(2) Natural - (3) Natural	1.548	2.336	.420	.692	2.405	3.691	30	.001
Pair 6	(2) Natural - (4) Natural	.290	2.411	.433	-.594	1.175	.670	30	.508
Pair 7	(2) Natural - (5) Natural	1.387	2.290	.411	.547	2.227	3.372	30	.002
Pair 8	(3) Natural - (4) Natural	-1.258	2.160	.388	-2.050	-.466	-3.243	30	.003
Pair 9	(3) Natural - (5) Natural	-.161	2.570	.462	-1.104	.782	-.349	30	.729
Pair 10	(4) Natural - (5) Natural	1.097	2.371	.426	.227	1.967	2.575	30	.015

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	(1) Candid - (2) Candid	-1.903	2.135	.383	-2.686	-1.120	-4.964	30	.000
Pair 2	(1) Candid - (3) Candid	-.194	2.182	.392	-.994	.607	-.494	30	.625
Pair 3	(1) Candid - (4) Candid	-1.129	1.668	.300	-1.741	-.517	-3.768	30	.001
Pair 4	(1) Candid - (5) Candid	.194	2.151	.386	-.596	.983	.501	30	.620
Pair 5	(2) Candid - (3) Candid	1.710	2.610	.469	.752	2.667	3.647	30	.001
Pair 6	(2) Candid - (4) Candid	.774	2.655	.477	-.200	1.748	1.624	30	.115
Pair 7	(2) Candid - (5) Candid	2.097	2.737	.492	1.093	3.101	4.266	30	.000
Pair 8	(3) Candid - (4) Candid	-.935	2.308	.415	-1.782	-.089	-2.256	30	.031
Pair 9	(3) Candid - (5) Candid	.387	2.348	.422	-.474	1.248	.918	30	.366
Pair 10	(4) Candid - (5) Candid	1.323	2.257	.405	.495	2.150	3.263	30	.003

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	(1) Authentic - (2) Authentic	-1.484	2.111	.379	-2.258	-.709	-3.913	30	.000
Pair 2	(1) Authentic - (3) Authentic	-.677	2.151	.386	-1.466	.111	-1.754	30	.090
Pair 3	(1) Authentic - (4) Authentic	-1.129	1.979	.355	-1.855	-.403	-3.177	30	.003
Pair 4	(1) Authentic - (5) Authentic	-.065	2.220	.399	-.879	.750	-.162	30	.873
Pair 5	(2) Authentic - (3) Authentic	.806	2.056	.369	.052	1.561	2.184	30	.037
Pair 6	(2) Authentic - (4) Authentic	.355	1.924	.346	-.351	1.061	1.027	30	.313
Pair 7	(2) Authentic - (5) Authentic	1.419	2.218	.398	.606	2.233	3.563	30	.001
Pair 8	(3) Authentic - (4) Authentic	-.452	1.729	.311	-1.086	.183	-1.454	30	.156
Pair 9	(3) Authentic - (5) Authentic	.613	1.430	.257	.088	1.137	2.386	30	.024
Pair 10	(4) Authentic - (5) Authentic	1.065	1.965	.353	.344	1.785	3.016	30	.005

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
					95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1	(1) Posed appearance - (2) Posed appearance	1.710	1.918	.345	1.006	2.413	4.962	30	.000
Pair 2	(1) Posed appearance - (3) Posed appearance	-.194	2.007	.360	-.930	.543	-.537	30	.595
Pair 3	(1) Posed appearance - (4) Posed appearance	1.065	2.144	.385	.278	1.851	2.765	30	.010
Pair 4	(1) Posed appearance - (5) Posed appearance	-.194	2.136	.384	-.977	.590	-.505	30	.618
Pair 5	(2) Posed appearance - (3) Posed appearance	-1.903	2.286	.410	-2.742	-1.065	-4.636	30	.000
Pair 6	(2) Posed appearance - (4) Posed appearance	-.645	2.199	.395	-1.452	.162	-1.633	30	.113
Pair 7	(2) Posed appearance - (5) Posed appearance	-1.903	2.256	.405	-2.731	-1.076	-4.697	30	.000
Pair 8	(3) Posed appearance - (4) Posed appearance	1.258	2.097	.377	.489	2.027	3.340	30	.002
Pair 9	(3) Posed appearance - (5) Posed appearance	.000	1.693	.304	-.621	.621	.000	30	1.000
Pair 10	(4) Posed appearance - (5) Posed appearance	-1.258	2.221	.399	-2.073	-.444	-3.154	30	.004

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	(1) Artificial - (2) Artificial	.935	2.279	.409	.099	1.772	2.285	30	.030
Pair 2	(1) Artificial - (3) Artificial	.935	2.502	.449	.018	1.853	2.081	30	.046
Pair 3	(1) Artificial - (4) Artificial	1.194	2.535	.455	.264	2.124	2.621	30	.014
Pair 4	(1) Artificial - (5) Artificial	.613	2.565	.461	-.328	1.554	1.330	30	.193
Pair 5	(2) Artificial - (3) Artificial	.000	2.251	.404	-.826	.826	.000	30	1.000
Pair 6	(2) Artificial - (4) Artificial	.258	2.206	.396	-.551	1.067	.651	30	.520
Pair 7	(2) Artificial - (5) Artificial	-.323	2.088	.375	-1.088	.443	-.860	30	.396
Pair 8	(3) Artificial - (4) Artificial	.258	1.843	.331	-.418	.934	.779	30	.442
Pair 9	(3) Artificial - (5) Artificial	-.323	2.056	.369	-1.077	.431	-.874	30	.389
Pair 10	(4) Artificial - (5) Artificial	-.581	2.078	.373	-1.343	.182	-1.556	30	.130

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	(1) Candid picture - (2) Candid picture	-1.258	1.966	.353	-1.979	-.537	-3.563	30	.001
Pair 2	(1) Candid picture - (3) Candid picture	-.065	2.112	.379	-.839	.710	-.170	30	.866
Pair 3	(1) Candid picture - (4) Candid picture	-1.000	1.751	.315	-1.642	-.358	-3.179	30	.003
Pair 4	(1) Candid picture - (5) Candid picture	.677	2.329	.418	-.177	1.532	1.619	30	.116
Pair 5	(2) Candid picture - (3) Candid picture	1.194	2.358	.424	.329	2.059	2.818	30	.008
Pair 6	(2) Candid picture - (4) Candid picture	.258	1.879	.338	-.431	.947	.765	30	.450
Pair 7	(2) Candid picture - (5) Candid picture	1.935	2.265	.407	1.105	2.766	4.758	30	.000
Pair 8	(3) Candid picture - (4) Candid picture	-.935	2.542	.457	-1.868	-.003	-2.049	30	.049
Pair 9	(3) Candid picture - (5) Candid picture	.742	2.309	.415	-.105	1.589	1.789	30	.084
Pair 10	(4) Candid picture - (5) Candid picture	1.677	2.495	.448	.762	2.593	3.743	30	.001

Appendix 6.2. Mean of all variables

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Posing	6.16	31	1.003	.180
	(2) Posing	3.58	31	1.858	.334
Pair 2	(1) Posing	6.16	31	1.003	.180
	(3) Posing	6.19	31	1.493	.268
Pair 3	(1) Posing	6.16	31	1.003	.180
	(4) Posing	4.61	31	1.909	.343
Pair 4	(1) Posing	6.16	31	1.003	.180
	(5) Posing	5.90	31	1.620	.291
Pair 5	(2) Posing	3.58	31	1.858	.334
	(3) Posing	6.19	31	1.493	.268
Pair 6	(2) Posing	3.58	31	1.858	.334
	(4) Posing	4.61	31	1.909	.343
Pair 7	(2) Posing	3.58	31	1.858	.334
	(5) Posing	5.90	31	1.620	.291
Pair 8	(3) Posing	6.19	31	1.493	.268
	(4) Posing	4.61	31	1.909	.343
Pair 9	(3) Posing	6.19	31	1.493	.268
	(5) Posing	5.90	31	1.620	.291
Pair 10	(4) Posing	4.61	31	1.909	.343
	(5) Posing	5.90	31	1.620	.291

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Natural	3.45	31	1.767	.317
	(2) Natural	4.90	31	1.640	.295
Pair 2	(1) Natural	3.45	31	1.767	.317
	(3) Natural	3.35	31	2.026	.364
Pair 3	(1) Natural	3.45	31	1.767	.317
	(4) Natural	4.61	31	1.647	.296
Pair 4	(1) Natural	3.45	31	1.767	.317
	(5) Natural	3.52	31	1.981	.356
Pair 5	(2) Natural	4.90	31	1.640	.295
	(3) Natural	3.35	31	2.026	.364
Pair 6	(2) Natural	4.90	31	1.640	.295
	(4) Natural	4.61	31	1.647	.296
Pair 7	(2) Natural	4.90	31	1.640	.295
	(5) Natural	3.52	31	1.981	.356
Pair 8	(3) Natural	3.35	31	2.026	.364
	(4) Natural	4.61	31	1.647	.296
Pair 9	(3) Natural	3.35	31	2.026	.364
	(5) Natural	3.52	31	1.981	.356
Pair 10	(4) Natural	4.61	31	1.647	.296
	(5) Natural	3.52	31	1.981	.356

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Candid	2.84	31	1.440	.259
	(2) Candid	4.74	31	1.879	.338
Pair 2	(1) Candid	2.84	31	1.440	.259
	(3) Candid	3.03	31	2.008	.361
Pair 3	(1) Candid	2.84	31	1.440	.259
	(4) Candid	3.97	31	1.835	.329
Pair 4	(1) Candid	2.84	31	1.440	.259
	(5) Candid	2.65	31	1.664	.299
Pair 5	(2) Candid	4.74	31	1.879	.338
	(3) Candid	3.03	31	2.008	.361
Pair 6	(2) Candid	4.74	31	1.879	.338
	(4) Candid	3.97	31	1.835	.329
Pair 7	(2) Candid	4.74	31	1.879	.338
	(5) Candid	2.65	31	1.664	.299
Pair 8	(3) Candid	3.03	31	2.008	.361
	(4) Candid	3.97	31	1.835	.329
Pair 9	(3) Candid	3.03	31	2.008	.361
	(5) Candid	2.65	31	1.664	.299
Pair 10	(4) Candid	3.97	31	1.835	.329
	(5) Candid	2.65	31	1.664	.299

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Authentic	3.39	31	1.585	.285
	(2) Authentic	4.87	31	1.408	.253
Pair 2	(1) Authentic	3.39	31	1.585	.285
	(3) Authentic	4.06	31	1.611	.289
Pair 3	(1) Authentic	3.39	31	1.585	.285
	(4) Authentic	4.52	31	1.458	.262
Pair 4	(1) Authentic	3.39	31	1.585	.285
	(5) Authentic	3.45	31	1.786	.321
Pair 5	(2) Authentic	4.87	31	1.408	.253
	(3) Authentic	4.06	31	1.611	.289
Pair 6	(2) Authentic	4.87	31	1.408	.253
	(4) Authentic	4.52	31	1.458	.262
Pair 7	(2) Authentic	4.87	31	1.408	.253
	(5) Authentic	3.45	31	1.786	.321
Pair 8	(3) Authentic	4.06	31	1.611	.289
	(4) Authentic	4.52	31	1.458	.262
Pair 9	(3) Authentic	4.06	31	1.611	.289
	(5) Authentic	3.45	31	1.786	.321
Pair 10	(4) Authentic	4.52	31	1.458	.262
	(5) Authentic	3.45	31	1.786	.321

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Posed appearance	5.45	31	1.457	.262
	(2) Posed appearance	3.74	31	1.673	.300
Pair 2	(1) Posed appearance	5.45	31	1.457	.262
	(3) Posed appearance	5.65	31	1.404	.252
Pair 3	(1) Posed appearance	5.45	31	1.457	.262
	(4) Posed appearance	4.39	31	1.706	.306
Pair 4	(1) Posed appearance	5.45	31	1.457	.262
	(5) Posed appearance	5.65	31	1.427	.256
Pair 5	(2) Posed appearance	3.74	31	1.673	.300
	(3) Posed appearance	5.65	31	1.404	.252
Pair 6	(2) Posed appearance	3.74	31	1.673	.300
	(4) Posed appearance	4.39	31	1.706	.306
Pair 7	(2) Posed appearance	3.74	31	1.673	.300
	(5) Posed appearance	5.65	31	1.427	.256
Pair 8	(3) Posed appearance	5.65	31	1.404	.252
	(4) Posed appearance	4.39	31	1.706	.306
Pair 9	(3) Posed appearance	5.65	31	1.404	.252
	(5) Posed appearance	5.65	31	1.427	.256
Pair 10	(4) Posed appearance	4.39	31	1.706	.306
	(5) Posed appearance	5.65	31	1.427	.256

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Artificial	4.48	31	1.805	.324
	(2) Artificial	3.55	31	1.457	.262
Pair 2	(1) Artificial	4.48	31	1.805	.324
	(3) Artificial	3.55	31	1.895	.340
Pair 3	(1) Artificial	4.48	31	1.805	.324
	(4) Artificial	3.29	31	1.755	.315
Pair 4	(1) Artificial	4.48	31	1.805	.324
	(5) Artificial	3.87	31	1.857	.334
Pair 5	(2) Artificial	3.55	31	1.457	.262
	(3) Artificial	3.55	31	1.895	.340
Pair 6	(2) Artificial	3.55	31	1.457	.262
	(4) Artificial	3.29	31	1.755	.315
Pair 7	(2) Artificial	3.55	31	1.457	.262
	(5) Artificial	3.87	31	1.857	.334
Pair 8	(3) Artificial	3.55	31	1.895	.340
	(4) Artificial	3.29	31	1.755	.315
Pair 9	(3) Artificial	3.55	31	1.895	.340
	(5) Artificial	3.87	31	1.857	.334
Pair 10	(4) Artificial	3.29	31	1.755	.315
	(5) Artificial	3.87	31	1.857	.334

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	(1) Candid picture	3.03	31	1.538	.276
	(2) Candid picture	4.29	31	1.488	.267
Pair 2	(1) Candid picture	3.03	31	1.538	.276
	(3) Candid picture	3.10	31	2.150	.386
Pair 3	(1) Candid picture	3.03	31	1.538	.276
	(4) Candid picture	4.03	31	1.703	.306
Pair 4	(1) Candid picture	3.03	31	1.538	.276
	(5) Candid picture	2.35	31	1.684	.302
Pair 5	(2) Candid picture	4.29	31	1.488	.267
	(3) Candid picture	3.10	31	2.150	.386
Pair 6	(2) Candid picture	4.29	31	1.488	.267
	(4) Candid picture	4.03	31	1.703	.306
Pair 7	(2) Candid picture	4.29	31	1.488	.267
	(5) Candid picture	2.35	31	1.684	.302
Pair 8	(3) Candid picture	3.10	31	2.150	.386
	(4) Candid picture	4.03	31	1.703	.306
Pair 9	(3) Candid picture	3.10	31	2.150	.386
	(5) Candid picture	2.35	31	1.684	.302
Pair 10	(4) Candid picture	4.03	31	1.703	.306
	(5) Candid picture	2.35	31	1.684	.302

Appendix 7. Moderator Narcissism model 1 (Hayes 2013) results for brand evaluation, advert evaluation and purchase likelihood

Appendix 7.1 Purchase likelihood as dependent variable

```
Run MATRIX procedure:

*************** PROCESS Procedure for SPSS Version 3.4.1 ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : Likely
    X  : POS_NAT
    W  : Narcis_S

Covariates:
 Gender

Sample
Size:  158
(EXCLUDING THE OUTLIERS)
**************************************************************************
OUTCOME VARIABLE:
 Likely

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .3182      .1013     1.8867     4.3105     4.0000   153.0000      .0025

Model
              coeff         se          t          p       LLCI       ULCI
constant     5.7975     1.5160     3.8243      .0002     2.8026     8.7924
POS_NAT     -3.2898     1.8921    -1.7388      .0841    -7.0278      .4481
Narcis_S    -2.6372     1.1505    -2.2922      .0233    -4.9101     -.3643
Int_1        3.1590     1.4812     2.1327      .0345      .2327     6.0852
Gender       -.1866      .2225     -.8388      .4029     -.6262      .2529

Product terms key:
 Int_1    :        POS_NAT  x        Narcis_S

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0267     4.5485     1.0000   153.0000      .0345
----------
    Focal predict: POS_NAT  (X)
          Mod var: Narcis_S (W)

Conditional effects of the focal predictor at values of the moderator(s):

   Narcis_S     Effect         se          t          p       LLCI       ULCI
```

```
     1.1250      .2640      .3058      .8633      .3893     -.3402      .8683
     1.2500      .6589      .2213     2.9774      .0034      .2217     1.0961
     1.4375     1.2512      .3327     3.7610      .0002      .5940     1.9085

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

W values in conditional tables are the 16th, 50th, and 84th percentiles.

NOTE: Variables names longer than eight characters can produce incorrect
output.
      Shorter variable names are recommended.

------ END MATRIX -----
```

Appendix 7.2. Advertisement evaluation as dependent variable

```
Run MATRIX procedure:

*************** PROCESS Procedure for SPSS Version 3.4.1 ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : Ad_Eva
    X  : POS_NAT
    W  : Narcis_S

Covariates:
 Gender

Sample
Size:  160

**************************************************************************
OUTCOME VARIABLE:
 Ad_Eva

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2802      .0785     2.0248     3.3026     4.0000   155.0000      .0125

Model
              coeff         se          t          p       LLCI       ULCI
constant     3.4569     1.5617     2.2136      .0283      .3720     6.5418
POS_NAT      1.3684     1.9570      .6993      .4854    -2.4974     5.2342
Narcis_S      .0858     1.1852      .0723      .9424    -2.2556     2.4271
Int_1        -.4602     1.5309     -.3006      .7641    -3.4842     2.5638
Gender       -.1912      .2295     -.8330      .4061     -.6446      .2622

Product terms key:
 Int_1    :        POS_NAT  x        Narcis_S
```

```
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0005      .0904     1.0000   155.0000      .7641

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

NOTE: Variables names longer than eight characters can produce incorrect
output.
      Shorter variable names are recommended.

------ END MATRIX -----
```

Appendix 7.3. Brand evaluation as dependent variable

```
Run MATRIX procedure:

*************** PROCESS Procedure for SPSS Version 3.4.1 ***************

         Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : Brand_Ev
    X  : POS_NAT
    W  : Narcis_S

Covariates:
 Gender

Sample
Size:  160

**************************************************************************
OUTCOME VARIABLE:
 Brand_Ev

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2428      .0590     1.9835     2.4284     4.0000   155.0000      .0501

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.8399     1.5457     3.1313      .0021     1.7866     7.8932
POS_NAT     -1.7830     1.9369     -.9205      .3587    -5.6092     2.0432
Narcis_S    -1.3062     1.1731    -1.1135      .2672    -3.6236     1.0111
Int_1        1.9061     1.5152     1.2580      .2103    -1.0869     4.8992
Gender        .0637      .2272      .2805      .7794     -.3850      .5125
```

```
Product terms key:
 Int_1    :        POS_NAT  x        Narcis_S

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0096     1.5826     1.0000   155.0000      .2103

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

NOTE: Variables names longer than eight characters can produce incorrect
output.
      Shorter variable names are recommended.

------ END MATRIX -----
```

Appendix 8. Moderator Endorser's modeling style model 1 (Hayes 2013) results for purchase likelihood as dependent variable

```
    Y  : Likely
    X  : Narcis_S
    W  : POS_NAT

Covariates:
 Gender

Sample
Size:  158

**************************************************************************
OUTCOME VARIABLE:
 Likely

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .3182      .1013     1.8867     4.3105     4.0000   153.0000      .0025

Model
              coeff         se          t          p       LLCI       ULCI
constant     5.7975     1.5160     3.8243      .0002     2.8026     8.7924
Narcis_S    -2.6372     1.1505    -2.2922      .0233    -4.9101     -.3643
POS_NAT     -3.2898     1.8921    -1.7388      .0841    -7.0278      .4481
Int_1        3.1590     1.4812     2.1327      .0345      .2327     6.0852
Gender       -.1866      .2225     -.8388      .4029     -.6262      .2529

Product terms key:
 Int_1    :        Narcis_S x        POS_NAT

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0267     4.5485     1.0000   153.0000      .0345
----------
    Focal predict: Narcis_S (X)
          Mod var: POS_NAT  (W)

Conditional effects of the focal predictor at values of the moderator(s):

    POS_NAT     Effect         se          t          p       LLCI       ULCI
      .0000    -2.6372     1.1505    -2.2922      .0233    -4.9101     -.3643
     1.0000      .5218      .9435      .5531      .5810    -1.3422     2.3859
```

Appendix 9. Moderator and Mediator impression management goal & impression management goal (model 7 (Hayes 2013) results for purchase likelihood as dependent variable

```
Model  : 7
    Y  : Likely
    X  : POS_NAT
   M1  : Mediator
   M2  : Mediat_1
    W  : Narcis_S

Covariates:
 Gender

Sample
Size:  158

**************************************************************************
OUTCOME VARIABLE:
 Mediator

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1178      .0139     2.4390      .5385     4.0000   153.0000      .7077

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.8422     1.7236     2.8093      .0056     1.4371     8.2474
POS_NAT       .6638     2.1513      .3085      .7581    -3.5862     4.9138
Narcis_S     -.1873     1.3081     -.1432      .8863    -2.7716     2.3969
Int_1        -.7449     1.6841     -.4423      .6589    -4.0720     2.5822
Gender       -.0947      .2530     -.3742      .7088     -.5944      .4051

Product terms key:
 Int_1    :        POS_NAT  x        Narcis_S

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0013      .1957     1.0000   153.0000      .6589
----------
    Focal predict: POS_NAT  (X)
          Mod var: Narcis_S (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   POS_NAT    Narcis_S   Mediator   .
BEGIN DATA.
      .0000     1.1250     4.4829
     1.0000     1.1250     4.3086
      .0000     1.2500     4.4595
```

```
     1.0000     1.2500     4.1921
      .0000     1.4375     4.4244
     1.0000     1.4375     4.0173
END DATA.
GRAPH/SCATTERPLOT=
 Narcis_S WITH     Mediator BY       POS_NAT  .

************************************************************************
OUTCOME VARIABLE:
 Mediat_1

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1636      .0268     2.0022     1.0514     4.0000   153.0000      .3827

Model
             coeff         se          t          p       LLCI       ULCI
constant     2.9849     1.5617     1.9113      .0578     -.1004     6.0701
POS_NAT      1.3091     1.9491      .6716      .5028    -2.5416     5.1598
Narcis_S      .3540     1.1852      .2987      .7656    -1.9875     2.6955
Int_1        -.6985     1.5259     -.4578      .6478    -3.7130     2.3160
Gender       -.1458      .2292     -.6361      .5256     -.5986      .3070

Product terms key:
 Int_1    :        POS_NAT  x        Narcis_S

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0013      .2095     1.0000   153.0000      .6478
----------
    Focal predict: POS_NAT  (X)
          Mod var: Narcis_S (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   POS_NAT    Narcis_S   Mediat_1   .
BEGIN DATA.
      .0000     1.1250     3.1542
     1.0000     1.1250     3.6776
      .0000     1.2500     3.1985
     1.0000     1.2500     3.6345
      .0000     1.4375     3.2649
     1.0000     1.4375     3.5699
END DATA.
GRAPH/SCATTERPLOT=
 Narcis_S WITH     Mediat_1 BY       POS_NAT  .

************************************************************************
OUTCOME VARIABLE:
 Likely

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .3793      .1439     1.7973     6.4269     4.0000   153.0000      .0001
```

```
Model
              coeff         se          t          p       LLCI       ULCI
constant     1.4522      .4954     2.9312      .0039      .4734     2.4309
POS_NAT       .6088      .2215     2.7487      .0067      .1712     1.0465
Mediator      .0373      .0846      .4413      .6596     -.1298      .2045
Mediat_1      .2551      .0935     2.7275      .0071      .0703      .4400
Gender       -.1640      .2108     -.7778      .4379     -.5804      .2525

****************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .6088      .2215     2.7487      .0067      .1712     1.0465

Conditional indirect effects of X on Y:

INDIRECT EFFECT:
 POS_NAT     ->    Mediator    ->    Likely

   Narcis_S     Effect     BootSE   BootLLCI   BootULCI
     1.1250     -.0065      .0346     -.0971      .0554
     1.2500     -.0100      .0316     -.0880      .0469
     1.4375     -.0152      .0478     -.1237      .0821

      Index of moderated mediation:
              Index     BootSE   BootLLCI   BootULCI
Narcis_S     -.0278      .1644     -.3693      .3321
---

INDIRECT EFFECT:
 POS_NAT     ->    Mediat_1    ->    Likely

   Narcis_S     Effect     BootSE   BootLLCI   BootULCI
     1.1250      .1335      .0950     -.0335      .3393
     1.2500      .1113      .0758     -.0046      .2845
     1.4375      .0778      .1077     -.0950      .3425

      Index of moderated mediation:
              Index     BootSE   BootLLCI   BootULCI
Narcis_S     -.1782      .4288     -.9522      .8190
---

********************** ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

W values in conditional tables are the 16th, 50th, and 84th percentiles.

NOTE: Variables names longer than eight characters can produce incorrect
output.
      Shorter variable names are recommended.

------ END MATRIX -----
```